# **Covid-19 coronavirus strain**)

During today's briefing, I am including some useful information that have been published by several organizations and the CDC. I encourage you to be familiar with them.

The most up to date global information can be gathered from the CDC directly at Organization https://www.cdc.gov/covid19 and at the World Health Website https://www.who.int/ websites. The **Dutchess** County www.dutchessny.gov/coronavirus. website NY State is: https://health.ny.gov/diseases/communicable/coronavirus/

So far, the CDC has been emphatic that the exposure in the United States remains very low currently but that they are planning for what they anticipate will be an inevitable escalation. While they have also indicated that the symptoms of the illness itself can range from mild to severe flulike symptoms and respiratory illness, each individual is uniquely susceptible.

Therefore, I encourage every member of our staff to mitigate the risk of infection by following some common practices:

- 1. Avoid close contact with people who are sick;
- 2. Cover your cough or sneeze with a disposable tissue and throw it in the trash. If you do not have a tissue available, sneeze or cough into your arm or clothing not your hand.
- 3. Avoid touching your face and especially your eyes, nose and mouth.
- **4.** Clean and disinfect frequently touched objects and surfaces.
- 5. Stay home if you are sick unless it is necessary to seek medical attention. Rely on telemedicine, which is covered by Town medical coverage. If experiencing symptoms, call your healthcare provider first.;
- **6.** Wash your hands frequently with soap and water for at least 20 seconds or use an alcohol based hand sanitizer if soap and water are not available. I have provided a hand out for homemade alcohol and non-alcohol based sanitizer solutions.

POSITIVE CASES	
Westchester	98 (16 new)
New York City	19 (7 new)
Nassau	17 (12 new)
Rockland	4 (2 new)
Saratoga	2
Suffolk	1
Ulster	1
TOTAL	142

# **How to Make Hand Sanitizer**

https://www.wikihow.com/Make-Hand-Sanitizer

Washing your hands with soap is better, but if you have no soap and water, hand sanitizer is the second best thing. Commercial hand sanitizer can get expensive, and with the shortage of hand sanitizer due to COVID-19, you may have to resort to making your own. Making your own hand sanitizer is a simple process that results in a formula you can customize to suit your personal tastes. Choose either alcohol or witch-hazel & tea-tree-oil sanitizer.

# **Alcohol-Based Hand Sanitizer**

- 1) Gather your ingredients. This sanitizer closely emulates the commercial kind, without all the chemicals and without the bad smell. Hand sanitizer should not replace hand washing; just use it when you really need it. Here's what you'll need:
  - 2/3 cup 99% rubbing alcohol (isopropyl alcohol) or 190-proof grain alcohol
  - 1/3 cup pure aloe vera gel (preferably without additives)
  - 8 to 10 drops essential oil, such as lavender, clove, cinnamon, or peppermint

- Mixing bowl
- Spoon
- Funnel
- Plastic container
- 2) Mix the alcohol and aloe vera gel in the bowl. Pour the ingredients into the bowl and use the spoon to mix them together well. The mixture should be completely smooth.
  - If you want the solution to be thicker, add another spoonful of aloe vera.
  - Or thin it out by adding another spoonful of alcohol.
- 3) Add the essential oil. Add it one drop at a time, stirring as you go. After about 8 drops, smell the mixture to see whether you like the scent. If it seems strong enough, stop there. If you like a stronger scent, add a few more drops.
  - Lavender, clove, cinnamon and peppermint essential oils have the added benefit of providing additional antiseptic properties to the mixture.
  - If you don't like these scents, it's fine to use whatever scent you enjoy. Lemon, grapefruit and passion fruit all work well.
- **4) Funnel the mixture into the container.** Place the funnel over the mouth of the container and pour the hand sanitizer in. Fill it up, then screw on the lid until you're ready to use it.
  - A small squirt bottle works well if you want to carry the sanitizer with you throughout the day.
  - If you make too much for the bottle, save the leftover sanitizer in a jar with a tightly-fitted lid.

# Witch Hazel-Based Hand Sanitizer

1) Gather your ingredients. Some people prefer not to use alcohol in their hand sanitizer, since alcohol has a strong smell and can have a severe drying effect on skin. Using a witch-hazel based sanitizer is a great alternative. Tea tree oil provides additional antiseptic benefits. Here's what you'll need:

- 1 cup pure aloe vera gel (preferably without additives)
- 1 1/2 teaspoons witch hazel
- 30 drops tea tree oil
- 5 drops essential oil, such as lavender or peppermint
- Mixing bowl
- Spoon
- Funnel
- Plastic container
- 2) Stir together the aloe vera gel, tea tree oil and witch hazel. If the mixture seems too thin, add another spoonful of aloe vera to thicken it. If it's too thick, add another spoonful of witch hazel.
- 3) Stir in the essential oil. Since the smell of the tea tree oil is already strong, go easy on the added essential oils. Five or so drops should be enough, but if you want to add more, stir it in one drop at a time.
- **4) Funnel the mixture into the container.** Place the funnel over the mouth of the container and pour the hand sanitizer in. Fill it up, then screw on the lid until you're ready to use it.
  - A small squirt bottle works well if you want to carry the sanitizer with you throughout the day.
  - If you make too much for the bottle, save the leftover sanitizer in a jar with a tightly-fitted lid.

# Coronavirus: Ten reasons why you ought not to panic

Regardless of whether we classify the new coronavirus as a pandemic, it is a serious issue. In less than two months, it has spread over several continents. Pandemic means sustained and continuous transmission of the disease, simultaneously in more than three different geographical regions. Pandemic does not refer to the lethality of a virus but to its transmissibility and geographical extension.

We certainly have is pandemic of fear. The entire planet's media is gripped by coronavirus. It is right that there is deep concern and mass planning for worst-case scenarios. And, of course, the repercussions move from the global health sphere into business and politics.

But it is also right that we must not panic. It would be wrong to say there is good news coming out of COVID-19, but there are causes for optimism; reasons to think there may be ways to contain and defeat the virus. And lessons to learn for the future.

#### 1. We know what it is

The first cases of AIDS were described in June 1981 and it took more than two years to identify the virus (HIV) causing the disease. With COVID-19, the first cases of severe pneumonia were reported in China on December 31, 2019 and by January 7 the virus had already been identified. The genome was available on day 10. We already know that it is a new coronavirus from group 2B, of the same family as the SARS, which we have called SARSCoV2. The disease is called COVID-19. It is thought to be related to coronavirus of bats. Genetic analyses have confirmed that it has a recent natural origin (between the end of November and the beginning of December) and that, although viruses live by mutating, its mutation rate may not be very high.

#### 2. We know how to detect the virus

Since January 13, a test to detect the virus has been available.

### 3. The situation is improving in China

The strong control and isolation measures imposed by China are paying off. For several weeks now, the number of cases diagnosed every day is decreasing. A very

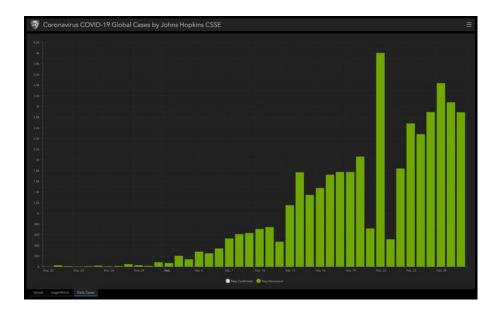
detailed epidemiological follow-up is being carried out in other countries; outbreaks are very specific to areas, which can allow them to be controlled more easily.

#### 4.80% of cases are mild

The disease causes no symptoms or is mild in 81% of cases. Of course, in the remaining 14%, it can cause severe pneumonia and in 5% it can become critical or even fatal. It is still unclear what the death rate may be. Be it could be lower than some estimates so far.

# 5. People heal

Much of the reported data relates to the increase in the number of confirmed cases and the number of deaths, but most infected people are cured. There are 13 times more cured cases than deaths, and that proportion is increasing.



# 6. Symptoms appear mild in children

Only 3% of cases occur in people under 20, and mortality under 40 is only 0.2%. Symptoms are so mild in children that it can go unnoticed.

### 7. The virus can be wiped clean

The virus can be effectively inactivated from surfaces with a solution of ethanol (62-71% alcohol), hydrogen peroxide (0.5% hydrogen peroxide) or sodium hypochlorite (0.1% bleach), in just one minute. Frequent handwashing with soap and water is the most effective way to avoid contagion.

# 8. Science is on it, globally

It is the age of international science cooperation. After just over a month, 164 articles could be accessed in PubMed on COVID19 or SARSCov2, as well as many others available in repositories of articles not yet reviewed. They are preliminary works on vaccines, treatments, epidemiology, genetics and phylogeny, diagnosis, clinical aspects, etc. These articles were elaborated by some 700 authors, distributed throughout the planet. It is cooperative science, shared and open. In 2003, with the SARS epidemic, it took more than a year to reach less than half that number of articles. In addition, most scientific journals have left their publications as open access on the subject of coronaviruses.

### 9. There are already vaccine prototypes

Our ability to design new vaccines is spectacular. There are already more than eight projects underway seeking a vaccine against the new coronavirus. There are groups that work on vaccination projects against similar viruses.

The vaccine group of the University of Queensland, in Australia, has announced that it is already working on a prototype using the technique called "molecular clamp", a novel technology. This is just one example that could allow vaccine production in record time. Prototypes may soon be tested on humans.

### 10. Antiviral trials are underway

Vaccines are preventive. Right now, the treatment of people who are already sick is important. There are already more than 80 clinical trials analysing coronavirus treatments. These are antivirals that have been used for other infections, which are already approved and that we know are safe.

One of those that has already been tested in humans is remdesivir, a broad-spectrum antiviral still under study, which has been tested against Ebola and SARS/MERS.

Another candidate is chloroquine, an antimalarial that has also been seen to have potent antiviral activity. It is known that chloroquine blocks viral infection by increasing the pH of the endosome, which is needed for the fusion of the virus with the cell, thus inhibiting its entry. It has been demonstrated that this compound blocks the new coronavirus in vitro and it is already being used in patients with coronavirus pneumonia.

Other proposed trials are based on the use of oseltamivir (which is used against the influenza virus), interferon-1b (protein with antiviral function), antisera from people who recovered or monoclonal antibodies to neutralise the virus. New therapies have been proposed with inhibitory substances, such as baricitinibine, selected by artificial intelligence.

The 1918 flu pandemic caused more than 25 million deaths in less than 25 weeks. Could something similar happen now? Probably not; we have never been better prepared to fight a pandemic.

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